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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/694,145	10/27/2003	Barbara Horn	200314366-1	3276
22879	7590	09/20/2005	EXAMINER	
HEWLETT PACKARD COMPANY P O BOX 272400, 3404 E. HARMONY ROAD INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400			VO, ANH T N	
			ART UNIT	PAPER NUMBER
			2861	

DATE MAILED: 09/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/694,145

Applicant(s)

HORN ET AL.

Examiner

Anh T.N. Vo

Art Unit

2861

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 6 and 34-38 is/are pending in the application.
- 4a) Of the above claim(s) 6 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 34-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4/13/05 & 7/6/06.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election /Restriction

Applicant's election without traverse of claims 34-38 filed on 7/25/05 is acknowledged. Claim 6 has been withdrawn from consideration by the present amendment because drawn to a print cartridge, classified in Class 347, subclass 87. The claim 6 and the claims 34-38 have their different classification (i.e. the claim 6 is in class/subclass 347/87 and the claims 34-38 are in class/subclass 347/47). Therefore, restriction for examination purposes as indicated is proper and the restriction is made final.

The non-elected claims 1-5 and 7-33 are canceled by the present amendment.

Information Disclosure Statement

The references cited on PTO 1449 have been considered.

Specification

The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. However, the applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Double patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686

F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 34-38 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 27-29 of Pub No: US 2005/0036004A1. Although the conflicting claims are not identical, they are not patentably distinct from each other because they claim a fluid ejecting device comprising:

- a substrate;
- a fluid-handling slot;
- an orifice layer ; and
- multiple firing nozzles.

This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

Claim Rejections

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 34-38 are rejected under 35 USC 102 (b) as being anticipated by Baughman et al. (US Pat. 5,608,436).

Baughman et al. disclose in Figures 4A-6D an ink jet print head comprising:

- a substrate (12) comprising at least a first substrate surface (12a) and a second substrate surface (12b), a fluid-handling slot (18) formed by at least two substrate removal processes and extending through the substrate (12) between the first substrate surface and the second substrate surface;
- an orifice layer (22) positioned over the first substrate surface, the orifice layer having multiple firing nozzles (20) formed therein, at least some of the nozzles being in fluid flowing relation with the fluid-handling slot (18), wherein at least one of the first substrate surface and the second substrate surface being mechanically conditioned by at least one of the removal processes prior to the orifice layer (22) being positioned over the first substrate surface, at least in part, to reduce an incidence of debris occluding ink flow through individual nozzles;
- wherein the fluid-handling slot (18) is formed utilizing three different substrate removal processes;
- wherein the fluid-handling slot (18) is formed utilizing at least one substrate removal process directed at the first substrate surface and at least two different substrate removal processes directed at the second substrate surface;
- a substrate (12) for supporting overlying layers (26, 17, 22); and, at least one feature formed in the substrate, the feature being formed with at least a first substrate removal process and a second different substrate removal process, wherein the second different substrate removal process also removes debris created by the first substrate removal process.

Claims 34-38 are rejected under 35 USC 102 (e) as being anticipated by Park et al. (US Pat. 6,757,973).

Park et al. disclose in Figures 1-14 an ink jet print head comprising:

- a substrate (1) comprising at least a first substrate surface and a second substrate surface, a fluid-handling slot (4) formed by at least two substrate removal processes and extending through the substrate (1) between the first substrate surface and the second substrate surface;
- an orifice layer (2) positioned over the first substrate surface, the orifice layer having multiple firing nozzles (2a) formed therein, at least some of the nozzles being in fluid flowing relation with the fluid-handling slot (4), wherein at least one of the first substrate surface and the second substrate surface being mechanically conditioned by at least one of the removal processes prior to the orifice layer (2) being positioned over the first substrate surface, at least in part, to reduce an incidence of debris occluding ink flow through individual nozzles (2a);
- wherein the fluid-handling slot (4) is formed utilizing three different substrate removal processes;
- wherein the fluid-handling slot (4) is formed utilizing at least one substrate removal process directed at the first substrate surface and at least two different substrate removal processes directed at the second substrate surface;
- a substrate (1) for supporting overlying layers (2, 3, 1a, 1b); and, at least one feature formed in the substrate, the feature being formed with at least a first substrate removal process and a second different substrate removal process, wherein the second different substrate removal process also removes debris created by the first substrate removal process.

Claims 34-38 are rejected under 35 USC 102 (b) as being anticipated by Mrvos et al. (US Pat. 6,409,312).

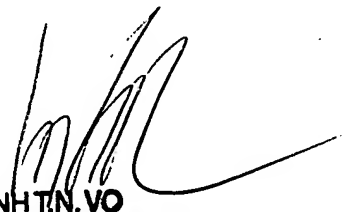
Mrvos et al. disclose in Figures 4-17 a printhead for an ink jet printer comprising:

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- a substrate (14) comprising at least a first substrate surface and a second substrate surface, a fluid-handling slot (24) formed by at least two substrate removal processes and extending through the substrate (14) between the first substrate surface and the second substrate surface;
- an orifice layer (52) positioned over the first substrate surface, the orifice layer having multiple firing nozzles (50) formed therein, at least some of the nozzles being in fluid flowing relation with the fluid-handling slot (24), wherein at least one of the first substrate surface and the second substrate surface being mechanically conditioned by at least one of the removal processes prior to the orifice layer (52) being positioned over the first substrate surface, at least in part, to reduce an incidence of debris occluding ink flow through individual nozzles (50);
- wherein the fluid-handling slot (24) is formed utilizing three different substrate removal processes;
- wherein the fluid-handling slot (24) is formed utilizing at least one substrate removal process directed at the first substrate surface and at least two different substrate removal processes directed at the second substrate surface;
- a substrate (14) for supporting overlying layers (44, 52); and, at least one feature formed in the substrate, the feature being formed with at least a first substrate removal process and a second different substrate removal process, wherein the second different substrate removal process also removes debris created by the first substrate removal process.

CONCLUSION

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Anh Vo whose telephone number is (571) 272-2262. The examiner can normally be reached on Tuesday to Friday from 9:00 A.M. to 7:00 P.M.. The fax number of this Group 2861 is (571) 273-8300.


ANH T.N. VO
PRIMARY EXAMINER
September 16, 2005